

REMARKS

Favorable reconsideration and allowance of this application are requested.

As an initial matter, the present Amendment is being filed concurrently with a Notice of Appeal so as to toll the time period set by the July 22, 2008 Official Action and thereby provide the Examiner with sufficient time to consider the applicants' comments below.

1. Discussion of Amendments

The typographical error in claim 1 helpfully noted by the Examiner has been corrected.

Claims 1-4 and 6-9 thus remain pending herein for which favorable reconsideration is solicited.¹

2. Response to Double Patenting Rejection

In response to the obviousness-type "double patenting" rejection based on copending USSN 10/517,595 ("the '595 application"), there is enclosed a Terminal Disclaimer which disclaims that portion of any patent issuing hereon which may extend beyond the expiration date of any patent issuing on the '595 application. Additionally, the Terminal Disclaimer also includes a provision that the patent issued hereon shall be enforceable only for and during such period that legal title thereto is the same as the legal title to the '595 application.

While applicant does not concur with the Examiner's position that the improvement sought to be patented herein is merely a matter of obvious choice or

¹ The July 22, 2008 Official Action incorrectly notes that claims 1-9 are pending even though claim 5 was canceled per the Amendment dated April 22, 2008. Correction of the record in this regard is requested.

design as compared to the invention claimed in the '595 application, applicants note that, in situations such as this, the issue is not one of "obviousness", but rather one of "identity of invention." *In re Vogel*, 164 USPQ 619 (CCPA 1970), *In re Kaplan*, 229 USPQ 678 (Fed. Cir. 1986). The Court in *Vogel* set forth the test for identity of invention as whether the claims of one case could be literally infringed without literally infringing the claims of the other. It is quite apparent that one of the claims of one of the '595 application and the present application could be infringed literally without infringing literally the claims of the other. Hence, there is no "identity of invention" so that the Terminal disclaimer enclosed herewith should, in any event, resolve the asserted issue of "double patenting".

3. Response to 35 USC §103(a) Rejection

The Examiner persists in the rejection of claims 1-9 under 35 USC §103(a) as allegedly being "obvious", and hence unpatentable, over Nijenhuis et al in view of Cahill et al. Applicants respectfully disagree with the Examiner and suggest that the pending claims are patentably distinguishable over such cited references.

Nijenhuis et al indeed discloses branched polyamide according to the formulae as expressed in the applicants' pending claim 1. However, it is really at this juncture that any perceived similarities end. Specifically, Nijenhuis does not relate to a laminate structure nor to a process of making a laminate, let alone that branched polyamides allow for thickness stability (i.e., a more even thickness distribution) to be achieved for such a laminate.

Cahill discloses polyamides for use in film packaging. However, this patent is directed to oxygen scavenging and is completely silent about thickness distribution when employing polyamides to a laminate, let alone that choosing certain polyamides leads to a more even thickness distribution. A person skilled in the art would not have a reasonable expectation for success in view of Cahill to employ polyamides according to

Nijenhuis. Nor would it be obvious to try, as nowhere in Cahill a hint is given about thickness distribution. Starting from Nijenhuis, it would also not be obvious to try to employ these polyamides onto laminates, as nowhere in Nijenhuis laminates are mentioned, let alone that this would lead to more even thickness distribution. A person skilled in the art would therefore have no reasonable expectation for success to come to the invention as presently claimed in this application.

In contrast to the Nijenhuis and Cahill references, the present invention relates to a process for manufacturing a laminate, which at least comprises the application of a layer of polyamide to a substrate, wherein the polyamide mainly is a branched polyamide, according to the formulae as expressed in claim 1. This results in a more even thickness distribution, i.e. it remains practically flat (see present application, page 2, line 17) even at higher production speeds. The following additional experimental evidence supports this conclusion:

Experimental Set-Up

Akulon F 126-C (relative viscosity 2.65) was used as the non-branched polyamide. As a branched polyamide, use was made of a polyamide made according to the process of WO 00/35992, from 97 parts by weight of caprolactam, 0.62 part by weight of bis-hexamethylene-triamine, 0.42 part by weight of adipic acid and 0.71 part by weight of benzoic acid with a relative viscosity (measured in a 1 mass% solution in 90% formic acid at 25°C) of 2.80. This polymer was post-condensed in the solid phase to a relative viscosity of 2.95 and provided with nucleating agent anti lubricant.

Kraft paper (800 mm width, 60 g/m²) was used as substrate and was coated, on a paper coating machine Er-We-Pa Davis Standard, with a coextruded 2-layer film consisting of 8 g/m² of polyamide and 8 g/m²

maleic anhydride grafted. The so obtained laminate consisted of a Kraft paper layer, an intermediate polyamide layer and a maleic anhydride grafted polyethylene layer.

Temperature settings of the tie resin extruder were 200 - 230 - 255 - 280 - 280, adapter 280 °C and the temperature settings of the PA6 extruder were: 280 - 290 - 290 - 290 - 290 °C, adapter 290 °C. The feed block and die temperature was 290 °C.

In order to quantify thickness distribution, web stability was measured for all laminates. The web is defined here as the distance from the extruder die to the substrate, which is about 350 mm for the production of laminates according to the set-up used. The higher the web stability, the more uniform the thickness distribution of the layers on the substrate.

Example 1

The branched polyamide as described above was used. The desired thickness of the resulting laminate was 16 grams per square meter. At a production rate of 200 m/min a web stability of 6 mm (width fluctuation on each side of the web) was observed. After increasing the production rate to 600 m/min, the web stability remained virtually the same.

Comparative Example 1

The non-branched polyamide as described above was used. The desired thickness of the resulting laminate was 16 grams per square meter. This resulted in a web-stability of 8 mm at a production rate of 200 m/min. Increasing the production rate proved to be impossible as no stable laminate could be formed.

DE KROON ET AL
Serial No. 10/520,704
December 22, 2008

Withdrawal of the rejection advanced under 35 USC §103(a) is therefore in order.

4. Fee Authorization

The Commissioner is hereby authorized to charge any deficiency, or credit any overpayment, in the fee(s) filed, or asserted to be filed, or which should have been filed herewith (or with any paper hereafter filed in this application by this firm) to our Account No. 14-1140.

Respectfully submitted,

NIXON & VANDERHYE P.C.

By: /Bryan H. Davidson/
Bryan H. Davidson
Reg. No. 30,251

BHD:dlb
901 North Glebe Road, 11th Floor
Arlington, VA 22203-1808
Telephone: (703) 816-4000
Facsimile: (703) 816-4100